O'zbekiston Respublikasi
Maktabgacha va maktab ta'limi vazirligi
2024-2025 o'quv yili
I-chorak
choraklik summativ baholash
test savollari.
9-sinf
2-variant

1-20 matematika, 21-35 ingliz tili, 36-50 fizika
(B-bilish; Q-qo'llash; M-mulohaza ga oid test savollari)

O'quvchi(F.I.SH)……………………………………...........…

1. (B 1 ball) Parabola uchining koordinatalarini toping.
$$y = x^2 + 8x$$
A) $(-4; 16)$ B) $(-4; -16)$ C) $(4; -16)$ D) $(4; 16)$

2. (B 1 ball) Kvadrat tengsizlikni yeching:
$$x^2 - 25 < 0$$
A) $(0; 5)$ B) $(-5; 10)$ C) $(-5; 0)$ D) $(-5; 5)$

3. **(B 1 ball)** Kvadrat tengsizlikni yeching:
$$\frac{x - 8}{x + 15} \geq 0$$
A) $(-\infty; -15) \cup [8; \infty)$ B) $(-\infty; -15) \cup (8; \infty)$
C) $(-\infty; -15] \cup [8; \infty)$ D) $(-\infty; -15] \cup (8; \infty)$

4. (Q 4 ball) Agar parabolaning $(1; 2)$ nuqta orqali o'tishi va uning uchi $(2; 1)$ nuqtada bo'lishi ma'lum bo'lsa, parabolaning tenglamasini toping.
A) $y = x^2 - 4x - 5$ B) $y = x^2 - 4x + 5$
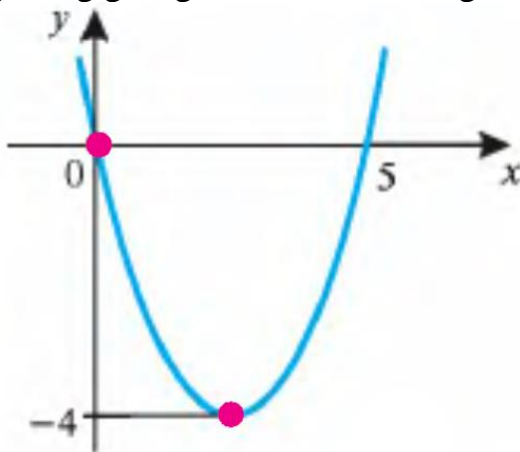C) $y = x^2 - 4x + 3$ D) $y = x^2 + 4x + 2$

5. (Q 4 ball) $y = ax^2 + bx + c$ kvadrat funksiya grafigi parabolaning tarmoqlari pastga yo'nalgan, uning uchining abssissasi ham, ordinatasi ham manfiy bo'lsa, a, b va c koeffitsiyentlarning ishorasi uchun keltirilgan to'g'ri moslikni toping.

I. a ning ishorasi	A. musbat
II. b ning ishorasi	B. manfiy
III. c ning ishorasi	

A) I-A; II-A; III-A   B) I-A; II-B; III-A
C) I-B; II-B; III-B   D) I-A; II-B; III-B

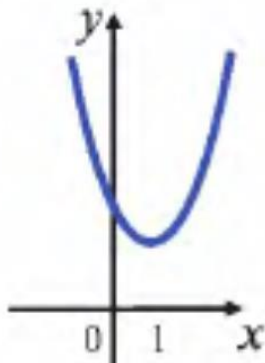**6. (Q 4 ball)** Kvadrat funksiyaning grafigi rasmda tasvirlangan.

Bu kvadrat funksiya uchun quyidagi tasdiqlarning to'g'ri yoki noto'g'ri ekanligini aniqlang.

№	Tasdiqlar	to'g'ri	noto'g'ri
1	Bu kvadrat funksiyaning eng kichik qiymati 0 ga teng		
2	Bu kvadrat funksiyaning $x = 0$ dagi qiymati 5 ga teng		
3	Bu kvadrat funksiyaning $x = 0$ dagi qiymati 0 ga teng		

A) noto'g'ri, noto'g'ri, to'g'ri;   B) to'g'ri, noto'g'ri, noto'g'ri;
C) noto'g'ri, to'g'ri, to'g'ri;   D) to'g'ri, to'g'ri, noto'g'ri;

7. (Q 4 ball) $y = ax^2 + bx + c$ kvadrat funksiya grafigi rasmda tasvirlangan.

Rasmdan foydalanib, $ax^2 + bx + c < 0$ tengsizlik yechimini toping.
A) $\emptyset$ B) $(-\infty; 1)$ C) $(1; \infty)$ D) $(-\infty; \infty)$

8. (Q 4 ball) Tengsizlikni yeching:
$$\frac{x^2 + 7x + 12}{x - 2} < 0$$
A) $(-\infty; -3) \cup (-2; 4)$ B) $(-\infty; -4) \cup (2; 3)$
C) $(-\infty; -4) \cup (-3; 2)$ D) $(-\infty; -4) \cup (-3; -2)$

9. (Q 4 ball) Funksiyaning aniqlanish sohasini toping:
$$y = \sqrt{5x^2 + 15x}$$
A) $[0; 3]$ B) $(-\infty; -3] \cup [0; \infty)$ C) $[-3; 0]$ D) $(-\infty; 0] \cup [3; \infty)$

10. (Q 4 ball) Funksiyaning kamayish oralig'ini toping:
$$y = -x^2 + 8x - 12$$
A) $[-4; \infty)$ B) $(-\infty; 4]$ C) $(-\infty; -4]$ D) $[4; \infty)$

11. (Q 4 ball) Tenglamani yeching:
$$\sqrt{x^2 - 9x + 12} = \sqrt{4 - 3x}$$
A) 2   B) 2 va 4   C) $\emptyset$ D) 4

12. (M 5 ball) a ning qanday qiymatlarida $ax^2 - 6x + 9a < 0$ tengsizlik x ning barcha qiymatlarida o'rinli bo'ladi?

A) $a < -1$ B) $a < 1$ C) $a > -1$ D) $a > 1$

13. (B 4 ball) Katetlari 10 cm va 24 cm bo'lgan to'g'ri burchakli uchburchakning gipotenuzasi uzunligini toping.

A) 28 cm   B) 25 cm   C) 30 cm   D) 26 cm

14. (B 4 ball) O'xshash uchburchaklar uchun quyidagi tasdiqlarning to'g'ri yoki noto'g'ri ekanligini aniqlang.

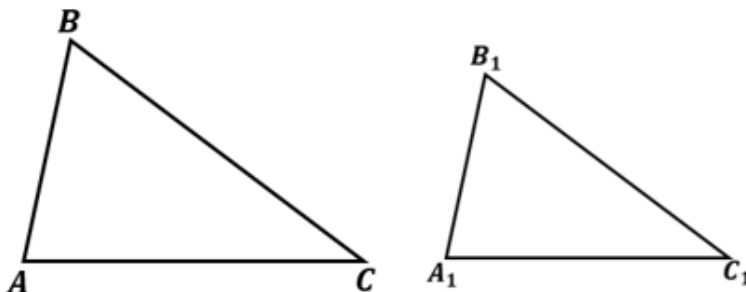| №	Tasdiqlar	to'g'ri	noto'g'ri
1	O'xshash uchburchaklarning mos burchaklari o'zaro teng bo'ladi		
2	O'xshash uchburchaklarning mos tomonlari proporsional bo'ladi		
3	O'xshash uchburchaklarning tomonlari nisbati k ga teng bo'lsa, perimetrlari nisbati k ga teng bo'ladi		

A) to'g'ri, to'g'ri, to'g'ri;   B) noto'g'ri, to'g'ri, to'g'ri;
C) noto'g'ri, to'g'ri, noto'g'ri;   D) to'g'ri, to'g'ri, noto'g'ri;

15. (Q 5,2 ball) Ikkita o'xshash uchburchak yuzlari 24 m² va 216 m². Kichik uchburchakning bir tomoni 4 m bo'lsa, katta uchburchakning unga mos tomoni uzunligini toping.

A) 12 m   B) 16 m   C) 36 m   D) 18 m

16. (Q 5,2 ball) Rasmda ABC va $A_1B_1C_1$ uchburchaklar tasvirlangan. Uchburchaklar o'xshashlik alomatlaridan foydalanib, quyidagi tasdiqlarning to'g'ri yoki noto'g'ri ekanligini aniqlang.

№	Tasdiqlar	to'g'ri	noto'g'ri
1	$\frac{BC}{B_1C_1} = \frac{AC}{A_1C_1}$ va $\angle B = \angle B_1$ bo'lsa, $\Delta ABC \backsim \Delta A_1B_1C_1$ bo'ladi		
2	$\angle A = \angle A_1$ va $\angle B = \angle B_1$ bo'lsa, $\Delta ABC \backsim \Delta A_1B_1C_1$ bo'ladi		
3	$\frac{AB}{A_1B_1} = \frac{AC}{A_1C_1} \neq \frac{BC}{B_1C_1}$ bo'lsa, $\Delta ABC \backsim \Delta A_1B_1C_1$ bo'ladi		

A) noto'g'ri, to'g'ri, noto'g'ri;   B) noto'g'ri, noto'g'ri, to'g'ri;
C) to'g'ri, noto'g'ri, noto'g'ri;   D) to'g'ri, to'g'ri, noto'g'ri;

17. (Q 5,2 ball) $ABCD$ parallelogrammning CD tomonida E nuqta olingan. AE va BC nurlar F nuqtada kesishadi. Agar $DE = 6$ cm, $EC = 2$ cm, $BC = 15$ cm, $AE = 12$ cm bo'lsa, ABF uchburchak perimetrini toping.

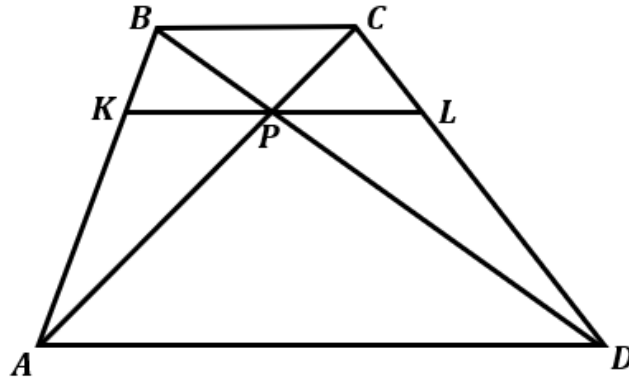A) 48 cm   B) 38 cm   C) 44 cm   D) 52 cm

18. (Q 5,2 ball) $O(2; 4)$ nuqtaga nisbatan simmetriyada $A(3; 6)$ nuqta qaysi nuqtaga o'tadi?

A) $(2; 1)$ B) $(1; 2)$ C) $(1; -2)$ D) $(-1; 2)$

19. (Q 5,2 ball) Perimetri 63 cm bo'lgan uchburchakning bir tomoniga parallel qilib o'tkazilgan to'g'ri chiziq undan perimetri 21 cm va yuzi 30 cm² ga teng uchburchak ajratadi. Berilgan uchburchak yuzini toping.

A) $360 \, cm^2$ B) $270 \, cm^2$ C) $480 \, cm^2$ D) $135 \, cm^2$

20. (M 6 ball) Rasmda tasvirlangan trapetsiyada $AD \parallel BC \parallel KL$. Agar $BC = 6$ cm, $AD = 10$ cm bo'lsa, KL kesma uzunligini toping.

A) 8 cm   B) 7,2 cm   C) 7,5 cm   D) 12 cm

21. **(B. 2 ball)** Complete the definition with personality adjective.

Someone who has a lot of friends is …

A)   popular
B)   polite
C)   helpful
D)   active

22**. (B. 2 ball)** Choose the correct answer.

My grandparents live down in the … . It gets dark early there when the sun goes down behind the hills.

A)   hill
B)   valley
C)   mountain
D)   volcano

23. **(B. 2 ball)** Choose the correct answer.

On this tour you travel …… and it has air conditioning and wifi.

A)   by coach
B)   by underground
C)   by scooter
D)   by boat

24. **(B. 2 ball)** Choose the correct answer.

Kate likes making things so she is good at ……. .

A)   Design and technology
B)   Drama
C)   PE
D)   ICT

25. **(Q. 2.8 ball)** Choose the correct form of the verb:

Every weekend, they _____ hiking in the mountains, but this weekend they _____ at home.

A)   go, are staying
B)   are going, staying

C)   goes, stays
D)   go, stays

26. **(Q. 2.8 ball)** Choose the correct form of the verb:

At the moment, my brother _____ in his room, but he normally _____ in the living room.

A)   studies, study
B)   is studying, studies
C)   study, studies
D)   is studying, study

27. **(Q. 2.8 ball)** Choose the correct form of the verb:

They _____ to the cinema last night.

A)   go
B)   went
C)   gone
D)   going

28. **(Q. 2.8 ball)** Choose the correct form of the verb:

He _____ his keys at home yesterday.

A)   forget
B)   forgets
C)   forgetting
D)   forgot

29. **(Q. 2.8 ball)** Choose the correct preposition to complete the sentence:

The cat is hiding _____ the table.

A)   between
B)   in
C)   into
D)   under

30. **(Q. 2.8 ball)** Choose the correct preposition to complete the sentence:

He is good _____ playing the guitar.

A)   on
B)   in
C)   at
D)   by

31. **(Q. 2.8 ball)** Choose the correct answer.

I study _____ when I'm not listening to music.

A)   more efficiently
B)   most efficient
C)   more efficient
D)   as efficiently as

32. **(Q. 2.8 ball)** Choose the correct answer

Who goes to the gym the _____ often?

A)   most
B)   very
C)   much
D)   many

33. **(Q. 2.8 ball)** Choose the correct form of the verb:

While we _____, we _____ a strange noise outside.

A)   talked, heard
B)   talked, were hearing
C)   were talking, heard
D)   were talking, were hearing

34. **(Q. 2.8 ball)** Choose the correct form of the verb:

I _____ my keys while I _____ for the bus.

A)   lost, waited

B)   lost, was waiting

C)   was losing, waited

D)   was losing, was waiting

35. **(M. 4 ball)** Read the text and choose the INCORRECT statement.

DAILY STORIES
by Margarita Marcos

Today I'm writing this blog about my oldest sister, Sofia. She's six years older than me. It's her birthday today and she's 21. She doesn't live in the same house as my parents and me, but her flat is in the same street. We live at number 22 Spring Street, and she lives in one of six flats at number 28.

Sofia is the first person I go to when I have a problem, and she always tries to help. She also helps me with my English homework. We all speak Spanish at home, but Sofia speaks English really well too as a second language. She knows some English from school, but she also listens to English music and watches English films. Another thing she is great at is dancing. She's teaching me the tango this week. Tango is really difficult, but I love the music and the dance.

My sister's interested in everything. She loves learning about science on the internet, and she often reads books about history in her free time. She also does three sports: football, swimming and running. She enjoys them all and is good at swimming. She likes camping, and she's learning to play the piano at the moment, too. She can't play very well yet, but she practises every day. She's also planning to learn the violin. She's a very active person! I really don't know how she has time to do so many things!

A)   Sofia speaks English well as a second language.

B)   Sofia does three sports: football, swimming, and running.

C)   Sofia is a very active person and manages to do many things.

D)   Sofia learned English only from school.

36. (Bilish – 2 ball) Qaysi javob molekular-kinetik nazariyaning asosiy qoidalarini nisbatan to'liq bayon qiladi?

A.   modda elektron, proton va neytronlardan tashkil topgan

B.   har qanday modda zarralarining harorati zarralarning kinetik energiyasiga bog'liq

C.   har qanday jism molekulalardan tuzilgan, ular betartib harakatda bo'ladi, ular orasida o'zaro ta'sir kuchlari mavjud.

D.   barcha molekulalar zich holatda harakatda bo'ladi

37. (Qo'llash – 2,8 ball) 1 ta kumush atomining massasi $180 \cdot 10^{-27}$ kg bo'lsa, uning nisbiy atom massasini toping. (1 m.a.b = $1,67 \cdot 10^{-27}$ kg).

A.   107   C.   108

B.   120   D.   115

38. (Qo'llash – 2,8 ball) 150 g kislorod gazining miqdorini (mol) aniqlang.

$\mu = 32$ g/mol.

A.   5   B.   4,5

C.   4,9   D.   4,7

39. (Bilish – 2 ball) Molekular-kinetik nazariyaning asosiy tenglamasini toping.

A. $pV = const$

B. $pV = \nu RT$

C. $\frac{pV}{T} = const$

D. $p = \frac{2}{3}nE_k$

40. (Bilish – 2 ball) Quyida **A** ustunda berilgan haroratlarga **B** ustundan mos keluvchi haroratlarni to'g'ri moslab chiqing.

A (kelvin)	B (selsiy)
1) 275 K	a) 27°C
2) 300 K	b) 2 °C
3) 310 K	c) 37°C
	d) 57°C

A.   1-b; 2-a; 3-c   C.   1-c; 2-a; 3-b

B.   1-d; 2-c; 3-a   D.   1-c; 2-b; 3-a

41. (Qo'llash – 2,8 ball) Molekulalari ilgarilanma harakatining o'rtacha kinetik energiyasi $5,5{\cdot}10^{-21}$ J bo'lgan gazning temperaturasi qanday (°C)?

(k = $1,38{\cdot}10^{-23}$ J/K).

A.   –7,3   C.   11

B.   –8,3   D.   13

42. (Qo'llash – 2,8 ball) Mendeleyev-Klapeyron tenglamasidan ideal gazning zichligi qanday hisoblanadi?

A. $\rho = \frac{p}{RT}$

B. $\rho = \frac{RT}{p}$

C. $\rho = \frac{pM}{RT}$

D. $\rho = \frac{p}{RTM}$

43. (Qo'llash – 2,8 ball) Hajmi 150 litr bo'lgan idishda 350 g vodorod 500 atm bosim hosil qiladi. Uning temperaturasini toping (K). ($\mu = 2$ g/mol).

A. $4,5{\cdot}10^3$ C. $5,5{\cdot}10^3$

B. $5,16{\cdot}10^3$ D. $7,5{\cdot}10^3$

44. (Qo'llash – 2,8 ball) Gazning hajmi 8 l dan 5 l gacha izotermik ravishda kamaytirildi. Gazning boshlang'ich bosimi 20 kPa bo'lsa, siqilish natijasida bosim necha kPa ortgan?

A.   8   C.   15

B.   12   D.   32

45. (Qo'llash – 2,8 ball) Izobarik jarayonda gazning boshlang'ich hajmi 80 l va temperaturasi 300 K. Gaz isishi natijasida 100 l hajmni egallagan bo'lsa, uning oxirgi temperaturasini toping (K).

A.   400   C.   375
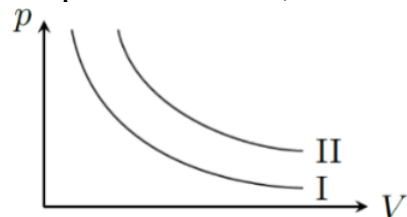
B.   350   D.   450

46. (Qo'llash – 2,8 ball) Ballondagi gazning bosimi 4 kPa va temperaturasi 300 K. Agar uni isitib temperaturasini 450 K ga yetkazsak, ballonda qanday bosim qaror topadi (kPa).

A.   6
B.   5
C.   8
D.   10

47. (Bilish – 2 ball) 1 mol bir atomli ideal gaz molekulalarining o'rtacha kinetik energiyalari yig'indisi qaysi javobda to'g'ri ko'rsatilgan?
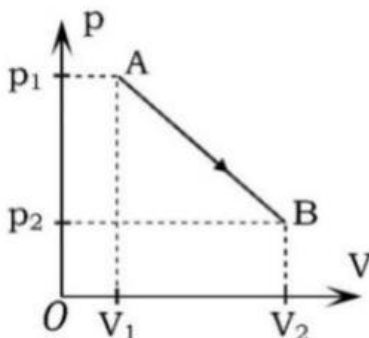
A. $E_k = 3kT$
B. $E_k = 3RT/2$
C. $E_k = 3kT/2$
D. $E_k = 3RT$

48. (Mulohaza – 4 ball) Ikki xil izotermik jarayon bajaryapti. Birinchi jarayonda ichki energiya 150 kJ, ikkinchi jarayonda esa birinchisidan 50 kJ farq qiladi. Agar temperaturalar farqi 100 K bo'lsa, ikkinchi jarayonning temperaturasi qancha (K)?

A.   150
B.   300
C.   400
D.   350

49. (Qo'llash – 2,8 ball) Rasmda tasvirlangan jarayonda ideal gazning bajargan ishini toping.

A. $(p_2 + p_1)(V_2 - V_1)/2$
B. $p_2V_2 - p_1V_1$
C. $(p_2 - p_1)(V_2 + V_1)/2$
D. $p_2V_1 - p_1V_2$

50. (Qo'llash – 2,8 ball) Silindrdagi gazning o'rtacha bosimi 0,8 MN/m². Porshenning yuzi 250 cm² va yurish uzunligi 0,3 m bo'lsa, porshenning bir marta yurishida gaz qanday ish bajaradi (kJ)?

A.   12
B.   20
C.   15
D.   6